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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/729,926 | 02/27/2001 | Johan Rune | 2466-78 | 7444 |

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NIXON & VANDERHYE P.C.

8th Floor
1100 North Glebe Rd.
Arlington, VA 22201

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| EXAMINER |
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HA, YVONNE QUY M

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| ART UNIT | PAPER NUMBER |
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2664

DATE MAILED: 04/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/729,926

Applicant(s)

RUNE ET AL.

Examiner

Yvonne Q. Ha

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-37, 55, 56, 63-66 is/are rejected.
- 7) ☒ Claim(s) 33-66 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 33-66 are objected to because of the following informalities: the word “characterized” is not an US standard practice. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 33, 34, 37, 55, 56, and 63-66 are rejected under 35 U.S.C. 102(e) as being anticipated by Kumar (US Patent 6,640,268).

Referring to claim 33, 55, 56, Kumar discloses connecting a first unit to an ad hoc network (figure 11, references 1, 5) comprising at least two units having different roles (col. 11, lines 29-37), the method characterized by the steps of: the first unit establishing contact with at least one of the units of the ad hoc network (col. 11, lines 39-48) and said at least one unit, in the establishment of contact, sending information to the first unit (col. 11, lines), the information including an indication of the role of said at least one unit in the ad hoc network (col. 11, lines 47-48), and the first unit thereafter, based on said information, connecting to said at least one unit, the first unit thereby becoming connected to the ad hoc network (col. 11, lines 49-67, col. 12, lines 1-7).

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Referring to claim 34, Kumar discloses all aspects of the claimed invention and further teaches establishing contact, the information includes operational information of itself and/or other units in the ad hoc network, the operational information being related to operation of the units as connected in the ad hoc network (col. 11, lines 45-48).

Referring to claim 37, Kumar discloses all aspects of the claimed invention and further teaches the FHS packet includes information as to whether the responding unit is a slave unit in at least one of piconet (col. 11, lines 43-48).

Referring to claims 63 and 65, Kumar discloses all aspects of the claimed invention and further teaches computer program product directly loadable into the internal memory of a digital computer, comprising software code portions for performing the steps of the methods of or the methods performed by any block or device when the product is run on a computer (figure 2, col. 4, lines 48-57).

Referring to claims 64 and 66, Kumar discloses all aspects of the claimed invention and further teaches computer program product stored on a computer usable medium, comprising readable program means for causing a computer to control the execution of the steps of the methods performed by any block or device (col. 4, lines 48-57; col. 5, lines 1-21, establishing a communication link)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 35 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumar (US Patent 6,640,268) in view of Haartsen (US Patent 6,590,928).

Referring to claims 35 and 36, Kumar discloses all aspects of the claimed invention and further teaches the units are adapted to communicate with other according to the Bluetooth specification and the adhoc network comprises at least one piconet formed according to the Bluetooth specification (figure 11), the roles of the units in the ad hoc network comprising master and slave, characterized in that in the step of the establishing contact (col. 11, lines 39-48; figure 11, references 1, 5). Kumar failed to disclose the INQUIRY/INQUIRY RESP messages. However, Haartsen discloses the first unit sends at least one INQUIRY message and said at least one unit responds by sending an INQUIRY RESPONSE message comprising a Frequency Hop Synchronization packet (col. 7, lines 1-5), the FHS packet including information of the status of said at least one unit in the at least one piconet (col. 7, lines 6-17, inquiry to master). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Kumar piconet configuration with master and slaves with Haartsen communication setup between master and slave. The adhoc system with master and slaves configuration gives an optimal usage of allocated spectrum, which can support voice and data. It is well known that the arrangement of master and slave need to be synchronized at all times during a connection set-up stage. Both prior arts disclose the inquiry message between the master and slave. Sending an inquiry and expect a response with status of the device is part of the connection set-up.

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Allowable Subject Matter

6. Claims 38-54, 57-62 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Tillgren et al. (US Patent 6,339,706) discloses wireless voice-activated remote control device
- Larsson et al. (US Patent 6,697,638) discloses intelligent portable phone with dual mode operation for automobile use

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne Q. Ha whose telephone number is 703-305-8392. The examiner can normally be reached on Monday-Friday 7a.m.-4p.m. Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ajit Patel can be reached on 703-308-5347. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YQH


Ajit Patel
Primary Examiner